

TiA

A TRAFFIC SAFETY SUCCESS STORY:
Traffic Safety Management System Used at the Local Level

PRESENTATION TO:

TRANSPORTATION SUMMIT COMMITTEE
October 6, 2003



TiA



PRESENTED BY:

Frank Cardimen
President, TiA
Executive Director - ITS MI

TiA



**Oakland
County**
Michigan

TRAFFIC IMPROVEMENT ASSOCIATION

Oakland County, Michigan

- Began 1967 -36 years old
- Non-Profit Corporation 501 (c. 3)
- Public - Private Partnership
- Independent
- Unique Organization to Michigan, U.S.



OAKLAND COUNTY STATISTICS

1967

• Population	300,000
• Number of Jobs	250,000
• Vehicle Miles Traveled	3.0 Billion
• Traffic Fatalities	206
• Fatality Rate	6.8



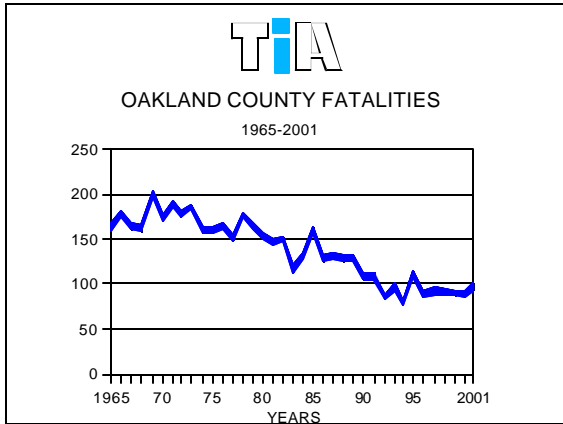
OAKLAND COUNTY STATISTICS

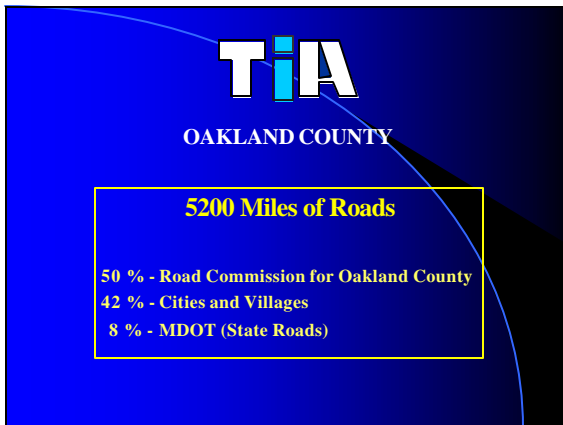
1967

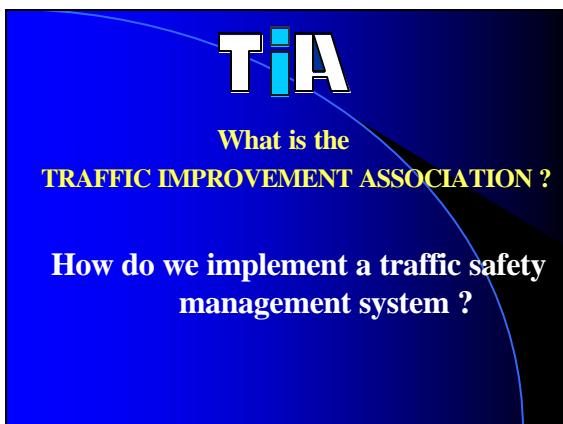
2003

• Population	300,000	1.3 Million
• Number of Jobs	250,000	900,000 +
• Vehicle Miles Traveled	3.0 Billion	12 Billion
• Traffic Fatalities	206	91
• Fatality Rate	6.8	0.7

1.3 - MI
1.5 - US









Mission Statement

The mission of the Traffic Improvement Association shall be to facilitate engineering, education and enforcement programs that **reduce human and economic losses caused by traffic crashes and congestion.**



CUSTOMERS

- 65 Communities
- Road Commission for Oakland County
- 48 Law Enforcement Agencies
- 15 District Courts
- Oakland County Schools
- Businesses and Citizens
- Traffic Safety Organizations - MDOT, AAA, FHWA, NHTSA, ITE, MADD, OHSP, SEMCOG, TRB, UMTRI, Traffic Engineering Consultants, etc.



FUNDING

40 % - Local Communities
30 % - Road Commission for Oakland County (RCOC)
20 % - Private corporations
10 % - Grants
100 % TOTAL

5 Full Time and 4 Part Time Staff and
2 Grant Related Staff



Traffic Management System

"On a day-to-day basis, TIA's Traffic Management System provides training, coordination, public support, advocacy, public information and education, clearinghouse functions and serves as a vehicle for countywide master planning in traffic."

Bruce Madsen
Executive Director
TIA



ROLE OF TIA *INFORMATION BROKER*



The 3 E's of Traffic Safety

- **ENFORCEMENT**
 - **EDUCATION**
 - **ENGINEERING**
- CRASH DATA ANALYSIS- County- wide
1300 Intersections, 2500 Road Links,
and Location Study analysis



ENGINEERING




Importance of Crash Data

TIA uses crash data to identify local problems and tries to find solutions !

In order to be useful, located crash data must be accurate and timely!



Uses Crash Data

- Traffic Engineering Studies - MDOT, locals, RCOC, and consulting engineers
- Support funding for road projects
 - Williams Lake Road, I-75 Corridor, I-96, etc.
- RCOC - Support Project Prioritization
- Litigation (Defense & Prosecution)
- Planning Activities
- Council & Board Reports
- Selective Law Enforcement Projects
- Countywide - Traffic Signal Retiming Project



Provides Reports to Stakeholders

- Location Studies
- Ranking Reports
- Engineering Crash Diagrams
- Special requests



Ranking Reports

TIA ranks each major intersection and roadlink in the county by:

- Frequency
- Severity
- Volume

One Example - 12 Mile and Beck Rd



1990 - 1992 Rankings

Frequency - 7th
Severity - 100th
Volume - 1st

12 Mile and Beck Road

Before Engineering Changes

<u>YEAR</u>	<u>People Injured</u>	<u>Crashes</u>
1993	34	80
1994	38	88
1995	39	84

November 1995 Engineering Changes



12 Mile and Beck Road

Before/After Engineering Changes

<u>Year</u>	<u>Persons Injured</u>	<u>Total Crashes</u>
1993	34	80
1994	38	88
1995	<u>39</u>	<u>84</u>
1996	5	37
1997	6	38
1998	5	39
1999	8	34
2000	1	12
2001	1	19
2002	4	27
2003 (July)	1	15



12 Mile and Beck Intersection

Investment \$ 1.2 Million

First year savings \$ 0.8 Million

Project Payback - 1 1/2 years !!

.... and most importantly
33 personal injuries prevented each year



What TIA can do **TODAY** with crash data!?

- Collect crash data directly from police
- Record/Scan and LOCATE within two weeks from time TIA receives crash report
- Today TIA has current crash information for Oakland County.....

Through August 1, 2003



TRAFFIC CRASH DATA/ANALYSES VALUE TO THE THE ROAD COMMISSION FOR OAKLAND COUNTY

- Planning
- Road Prioritization Projects
- Local Disputes
- Legal Issues
- Grant Preparation
- CORRECTIVE ACTION FOR INTERSECTIONS
- CORRECTIVE ACTION FOR ROAD LINKS
- Others

RCOC Planning Process - FHWA MODEL

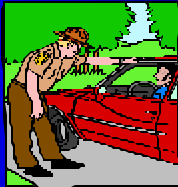


Other Traffic Engineering Support

- Traffic counts - average daily analyses
- Support locals by attending:
 - Board Meetings
 - Community Groups
 - Police Departments
 - Traffic Safety Committees, etc.
- Schools
- Businesses
- Media
- Special studies - *traffic signal retiming*, etc.
- Liaison for engineering projects with locals, RCOC, SEMCOG, and MDOT



LAW ENFORCEMENT



LAW ENFORCEMENT PROGRAMS

TIA USES CRASH DATA TO:

- Identify problem areas - eg., drunk driving
- Identify high/severe crash areas
- Support police patrols to mitigate problems
- Support "corridor" projects - multi-jurisdictions
- Support grant preparation-local, state and national
- Etc.

LAW ENFORCEMENT PROGRAMS

2002-2003

- **DESIGNED PROGRAMS FOR UNDERAGE DRINKING**

• “LOOKOUT” for Michigan (OHSP grant)

- Party Patrol
- Videos - young drivers, bar staff, etc.

- **“DRIVE MICHIGAN SAFELY TASK FORCE” (OHSP Grant)**

- CLICK IT OR TICKET
- YOU DRINK YOU DRIVE, YOU LOSE

- **TRAINING COURSES**

- Safe and Legal Traffic Stops Course
- .08 BAC Law Training
- Repeat Offender Training
- UD-10 review

AET = NHTSA Grant
1980 - 2003

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Alcohol Enforcement Team Recognition Luncheon



**10,000 DRUNK DRIVING ARRESTS
1980 - 2001**


The Palace of Auburn Hills
May 8, 2001

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Additional DRUNK DRIVING Programs




- Hosted ALCOHOL SUMMIT
- VIDEOS - Driver Education, Bars
- Advocacy - .08 BAC
- MADD Campaigns
- Training




TRAFFIC SAFETY COMMITTEES
FIRST RECOGNITION DINNER
 September 27, 2001
 Kingsley Inn

- 10 of 12 Committees Attended (70 People)
- Recognition by OHSP, RCOC, MDOT, TIA
- Sponsored by Giffels-Webster Engineers



EDUCATION





"EARLY BIRDS" MEETINGS

Celebrating 29 Years

Contemporary traffic safety issues

- Engineering
- Law Enforcement
- Federal and State Law Changes
- New traffic safety devices
- Use of Crash Data
- Roundabouts
- Single Point Intersections
- Mature Driver Issues

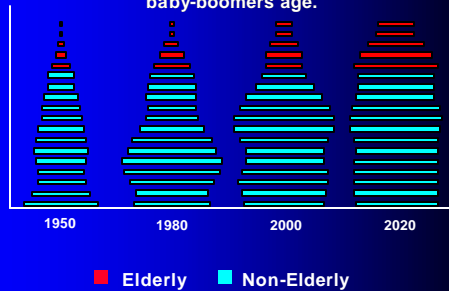


MATURE DRIVER ISSUE

- 1988 - 1992 TIA launches retraining workshops based on crash data from Michigan and US (GRANT from OHSP/NHTSA)
- 1997 - 2003 Resurrected workshop with UFOV
- 1999 - 2001 State of Michigan develops Strategic Plan
- 1999 State of Michigan hosts "White House" Conference on Mature Driver Issues.
- 2004 Michigan will host National Conference on Elderly Mobility - "Best Practices Worldwide"

National Population:

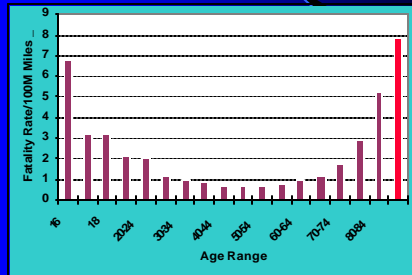
Notice the increase in the elderly population as the baby-boomers age.



Source: U.S. Census Bureau

U.S. Driver Fatality Rate by Age

(per 100 million miles of travel)





MATURE DRIVER WORKSHOP

OBJECTIVES

- DRIVER IMPROVEMENT PROGRAM
- PHYSICO-PHYSICAL EVALUATIONS
- ON-ROAD TEST EVALUATION

Two and one-half day workshop



MATURE DRIVER WORKSHOPS



- State and National Recognition
- 2003 Workshops - Michigan
- UFOV Evaluators - Michigan
- Video - Young/Old Driver
- Video - Communities - engineering for this segment

MATURE DRIVER ISSUES

Michigan Leadership

- Statewide Strategic Plan to GTSAC
- Progressive local and regional programs
- Training and self-evaluation programs
- Local engineering programs
- National Conference on Elderly Mobility
"Best Practices Worldwide"
September 12-15, 2004



Other Educational Programs

SAFETY BELT ISSUES

- Advocate - primary enforcement legislation
- Oakland County Safety Belt Surveys - 8 years
- Promotion campaigns - value of safety belts
- Click It or Ticket Campaign

ALCOHOL ISSUES


- Sobriety Courts
- BAC - .08
- New education programs - change behavior




..... in CONCLUSION

Michigan has a model for implementing traffic safety management systems at the local level !

CAN WE OR SHOULD WE DUPLICATE THIS MODEL?



TRAFFIC SAFETY

LOCAL/ REGIONAL ISSUES

1. Need for accurate and timely crash data
2. Need for local/regional organizations to implement a traffic safety management system; e.g. TIA
3. Requires this organization to analyze data and facilitate improvements throughout the community (*Local communities do NOT have expertise*)
4. Need initial funding for new organization
5. Need to demonstrate organization's value to local agencies for their long-term funding support
6. Requires coordination with national, state, regional and local traffic safety goals